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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,150	11/06/2001	Scott P. Taylor	7784-000284	5279
7590	05/19/2004			
Mark D. Elchuk and Kelly K. Burris Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, MI 48303			EXAMINER SHELTON, BRIAN K	
			ART UNIT 2611	PAPER NUMBER

DATE MAILED: 05/19/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/992,150

Applicant(s)

TAYLOR, SCOTT P.

Examiner

Brian Shelton

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. This Action is in response to the Application filed November 6, 2001.
2. The Application has been examined. **Claims 1-18** are pending. The rejections cited are as stated below:

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. **Claims 1 and 10** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites "...wherein the policy algorithm is executed to communicate the rules from the database to the content delivery system to control distribution of the content to the mobile platform." (Application, page 8, claim 1, lines 5-7). The above limitation, as presented, suggests that the 'rules' are being communicated in the sense of being transmitted from the 'database' to the 'content delivery system.' However, the specification fails to disclose a transmission of rules to the content delivery system. To the contrary, the specification discloses prioritization of content, according to rules, occurring at

the policy algorithm, and the prioritized content being transmitted to the content delivery system. To wit, Applicant discloses,

“Generally, output from the policy algorithm is transmitted to the content delivery system, *wherein prioritized content is communicated from the policy algorithm to the content delivery system, and the content is delivered accordingly to the mobile platform* based on the rules within the database and the priorities determined by the policy algorithm.”

(Application, page 4, paragraph 10 at lines 4-8) (emphasis added).

Applicant further discloses, “Accordingly, the policy algorithm 12 utilizes such information [referring to link management data], along with the rules within the database 14, *in order to prioritize the delivery of content 18 to the content delivery system 16.*” (Application, page 6, paragraph 18 at lines 3-5) (emphasis added).

In both instances, Applicant discloses a policy algorithm prioritizing content according to rules, and the subsequent transmission of the prioritized content to the content delivery system. Applicant has failed to disclose any embodiment supporting the *communication of rules* from the policy algorithm to the content delivery system. Therefore, claim 1 is rejected to as non-enabled according to 35 U.S.C. 112, 1<sup>st</sup> paragraph. Furthermore, since claim 10 recites the identical limitation (Application, page 10, claim 10 at lines 10-12), claim 10 is likewise rejected under 35 U.S.C. 112, 1<sup>st</sup> paragraph for failing to meet the enablement requirement.

In order to advance prosecution, The Examiner is interpreting the phrase “...executed to communicate the rules from the database to the content delivery

system..." in claims 1 and 10 in a manner consistent with the Applicant's disclosure (see above citations to Application). Thus, the "communication of the rules" from the policy algorithm to the content delivery system is interpreted as prioritization of content by the policy algorithm according to rules, and subsequent communication of the prioritized content from the policy algorithm to the content delivery system.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-2, 4-9 and 16-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell, U.S. Patent No. 6,529,706 in view of Dimitrijevic et al. (Dimitrijevic), U.S. Patent No. 5,978,363.

Regarding **claim 1**, Mitchell discloses a system for distributing content to a mobile platform (Aircraft **250**) (Fig. 2; col. 3, lines 47-50) comprising:

a Data Content Aggregator containing rules for distribution of the content (col. 5, lines 29-36 [Data Content Aggregator **220** comprises Data Queue

Manager **222**, wherein Data Queue Manager **222** schedules data delivery according to pre-established priority (e.g., rules for distribution));

a policy algorithm (Data Queue Manager **222**) in communication with the Data Content Aggregator (col. 5, lines 51-53; see also col. 9, lines 53-58 [describing priority algorithm of Data Queue Manager **222**]); and

a content delivery system (Network Operations Center **230** and Antenna System **231**; col. 5, lines 54-59);

wherein the policy algorithm is executed to communicate the rules from the Data Content Aggregator to the content delivery system to control distribution of the content to the mobile platform (col. 9, lines 53-60 [Data Content Aggregator **220**, comprising data queue manager **222**, weighing and selecting data according to priority algorithm and transmission of prioritized data to Network Operations Center **230**]).

But Mitchell fails to disclose the rules contained in a database, as claimed.

However, Dimitrijevic, in an analogous art, teaches a database containing rules for distribution of content (Fig. 6; col. 16, lines 49-64 [system resource database]; see col. 17, lines 17-41, describing event management; see also col. 19, line 37-25, describing management of satellite resources) for the benefit of scheduling and controlling resources of a satellite telecommunications network.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Data Content Aggregator of Mitchell to incorporate a database containing the rules for distribution of the

content, as taught by Dimitrijevic, for the benefit of scheduling and controlling resources of a satellite telecommunications network in a content distribution system.

The limitation of **claim 2** is encompassed by the teaching of Mitchell in view of Dimitrijevic, as discussed above relative to claim 1. Specifically, Mitchell discloses a link management system (Switch Center **293**) in communication with the policy algorithm (Data Queue Manager **222**), wherein the link management system provides the policy algorithm with available mobile platforms (col. 7, lines 11-17 [switching center **293** recognition of entitled users by address comprising aircraft tail number]; col. 7, lines 63-65 [transmission of entitled user's request to data content aggregator **220**]; col. 9, lines 53-58 [Data Queue Manager **222** prioritizing requested content]).

The limitation of **claim 4** is encompassed by the teaching of Mitchell in view of Dimitrijevic, as discussed above relative to claim 1. Specifically, Mitchell discloses the Data Content Aggregator and policy algorithm are located with a ground control station (ground station **217**) in communication with the mobile platform (col. 5, lines 25-28). Dimitrijevic teaches modifying the Data Content Aggregator to incorporate a database (Fig. 6; col. 16, lines 49-64 [system resource database]; see col. 17, lines 17-41, describing event management; see also col. 19, line 37-25, describing management of satellite resources).

The limitation of **claim 5** is encompassed by the teaching of Mitchell in view of Dimitrijevic, as discussed above relative to claim 4. Specifically, Mitchell discloses the ground control station is in communication with the mobile platform via satellite communication (col. 5, lines 56-64).

The limitation of **claim 6** is encompassed by the teaching of Mitchell in view of Dimitrijevic, as discussed above relative to claim 1. Specifically, Mitchell discloses the content comprising Internet web pages (col. 5, lines 43-47;).

The limitation of **claim 7** is encompassed by the teaching of Mitchell in view of Dimitrijevic, as discussed above relative to claim 1. Specifically, Mitchell discloses the content comprises audio data (streaming audio content; col. 8, lines 53-57).

The limitation of **claim 8** is encompassed by the teaching of Mitchell in view of Dimitrijevic, as discussed above relative to claim 1. Specifically, Mitchell discloses the content comprises video data (streaming video content; col. 8, lines 53-57).

The limitation of **claim 9** is encompassed by the teaching of Mitchell in view of Dimitrijevic, as discussed above relative to claim 1. Specifically, Mitchell



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discloses the policy algorithm is stored in the Data Content Aggregator (Fig. 2; Data Content Aggregator **220** comprising Data Queue Manager **222**; col. 9, lines 53-58). Dimitrijevic teaches modifying the Data Content Aggregator to incorporate a database (Fig. 6; col. 16, lines 49-64 [system resource database]; see col. 17, lines 17-41, describing event management; see also col. 19, line 37-25, describing management of satellite resources).

Regarding **claim 16**, Mitchell discloses a method of distributing content to a mobile platform (Aircraft **250**) (Fig. 2; col. 3, lines 47-50) comprising the steps of:

- (a) executing a policy algorithm (Data Queue Manager **222**) in communication with a Data Content Aggregator having rules for distribution of the content (col. 5, lines 29-36 [Data Content Aggregator **220** comprises Data Queue Manager **222**, wherein Data Queue Manager **222** schedules data delivery according to pre-established priority (e.g., rules for distribution));
- (b) transmitting output from the policy algorithm to a content delivery system (Network Operations Center **230** and Antenna System **231**) (col. 5, lines 51-59 [prioritized data transmitted to Network Operations Center **230**]; and

- (c) distributing content to the mobile platform (Aircraft **250**) based on the rules within the Data Content Aggregator (col. 5, lines 53-59; see also col. 9, lines 53-60, discussing priority algorithm).

But Mitchell fails to disclose the rules contained in a database, as claimed.

However, Dimitrijevic, in an analogous art, teaches a database containing rules for distribution of content (Fig. 6; col. 16, lines 49-64 [system resource database]; see col. 17, lines 17-41, describing event management; see also col. 19, line 37-25, describing management of satellite resources) for the benefit of scheduling and controlling resources of a satellite telecommunications network.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Data Content Aggregator of Mitchell to incorporate a database having rules for distribution of the content, as taught by Dimitrijevic, for the benefit of scheduling and controlling resources of a satellite telecommunications network in a content distribution system.

The limitation of **claim 17** is encompassed by the teaching of Mitchell in view of Dimitrijevic, as discussed above relative to claim 16. In particular, Mitchell discloses the step of providing available mobile platforms from a link management system (switching center **293**) to the policy algorithm (col. 7, lines 11-17 [switching center **293** recognizing entitled users by address comprising aircraft tail number]; col. 7, lines 63-65 [transmission of entitled user's request to

data content aggregator **220**]; col. 9, lines 53-58 [Data Queue Manager **222** prioritizing requested content]).

7. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell, U.S. Patent No. 6,529,706 in view of Dimitrijevic et al. (Dimitrijevic), U.S. Patent No. 5,978,363, as applied to claim 1, and further in view of Barbas et al (Barbas), U.S. Patent No. 6,256,315.

As for **claim 3**, the teaching of Mitchell in view of Dimitrijevic is relied upon as discussed above relative to claim 1. However, Mitchell in view of Dimitrijevic fails to disclose a plurality of buffers in communication with the policy algorithm to provide bandwidth utilization.

But Barbas, in an analogous art, teaches plurality of buffers (Fig. 1; buffers **38** associated with queue entry **34b** and buffers **36** associated with queue entry **34a**; see col. 5, lines 6-11)) in communication with queue traversal logic (i.e., policy algorithm; see col. 5, lines 46-51, describing queue traversal logic **40**) to provide bandwidth utilization (col. 5, lines 12-51) for the benefit of temporarily storing data units with relative priorities when transmission bandwidth becomes congested (see col. 2, lines 38-46).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the policy algorithm of Mitchell in

view of Dimitrijevic to incorporate a plurality of buffers in communication with the policy algorithm to provide bandwidth utilization, as taught by Barbas, for the benefit of temporarily storing data units with relative priorities when transmission bandwidth becomes congested in a content distribution system.

8. **Claims 10-15** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell, U.S. Patent No. 6,529,706 in view of Dimitrijevic et al. (Dimitrijevic), U.S. Patent No. 5,978,363, further in view of Barbas et al (Barbas), U.S. Patent No. 6,256,315.

Regarding **claim 10**, Mitchell discloses a system for distributing content to a mobile platform (Aircraft **250**) (Fig. 2; col. 3, lines 47-50), comprising:

a Data Content Aggregator containing rules for distribution of the content (col. 5, lines 29-36 [Data Content Aggregator **220** comprises Data Queue Manager **222**, wherein Data Queue Manager **222** schedules data delivery according to pre-established priority (e.g., rules for distribution));

a policy algorithm (Data Queue Manager **222**) in communication with the Data Content Aggregator (col. 5, lines 51-53; see also col. 9, lines 53-58 [describing priority algorithm of Data Queue Manager **222**]); and

a link management system (Switch Center **293**) in communication with the policy algorithm (Data Queue Manager **222**), wherein the link management system provides the policy algorithm with available mobile platforms (col. 7, lines

11-17 [switching center **293** recognizing entitled users by address comprising aircraft tail number]; col. 7, lines 63-65 [transmission of entitled user's request to data content aggregator **220**]; col. 9, lines 53-58 [Data Queue Manager **222** prioritizing requested content]); and

a content delivery system (Network Operations Center **230** and Antenna System **231**; col. 5, lines 54-59), wherein the policy algorithm is executed to communication the rules from the Data Content Aggregator to the content delivery system to control distribution of the content to the mobile platform (col. 9, lines 53-60 [Data Content Aggregator **220**, comprising data queue manager **222**, weighing and selecting data according to priority algorithm and transmission of prioritized data to Network Operations Center **230**]).

But Mitchell fails to disclose the rules contained in a database, as claimed.

However, Dimitrijevic, in an analogous art, teaches a database containing rules for distribution of content (Fig. 6; col. 16, lines 49-64 [system resource database]; see col. 17, lines 17-41, describing event management; see also col. 19, line 37-25, describing management of satellite resources) for the benefit of scheduling and controlling resources of a satellite telecommunications network.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Data Content Aggregator of Mitchell to incorporate a database containing the rules for distribution of the content, as taught by Dimitrijevic, for the benefit of scheduling and controlling

resources of a satellite telecommunications network in a content distribution system.

But the combination of Mitchell in view of Dimitrijevic fails to disclose a plurality of buffers in communication with the policy algorithm to provide bandwidth utilization.

However, Barbas, in an analogous art, teaches plurality of buffers (Fig. 1; buffers **38** associated with queue entry **34b** and buffers **36** associated with queue entry **34a**; see col. 5, lines 6-11)) in communication with queue traversal logic (i.e., policy algorithm; see col. 5, lines 46-51, describing queue traversal logic **40**) to provide bandwidth utilization (col. 5, lines 12-51) for the benefit of temporarily storing data units with relative priorities when transmission bandwidth becomes congested (see col. 2, lines 38-46).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the policy algorithm of Mitchell in view of Dimitrijevic to incorporate a plurality of buffers in communication with the policy algorithm to provide bandwidth utilization, as taught by Barbas, for the benefit of temporarily storing data units with relative priorities when transmission bandwidth becomes congested in a content distribution system.

The limitation of **claim 11** is encompassed by the teachings of Mitchell in view of Dimitrijevic, further in view of Barbas, as discussed above relative to claim 10. In particular, Mitchell discloses the Data Content Aggregator and policy

algorithm art located within a ground control station (Ground Station **217**) in communication with the mobile platform (col. 5, lines 25-28). Dimitrijevic teaches modifying the Data Content Aggregator to incorporate a database (Fig. 6; col. 16, lines 49-64 [system resource database]; see col. 17, lines 17-41, describing event management; see also col. 19, line 37-25, describing management of satellite resources).

The limitation of **claim 12** is encompassed by the teachings of Mitchell in view of Dimitrijevic, further in view of Barbas, as discussed above relative to claim 11. In particular, Mitchell discloses the ground control station is in communication with the mobile platform via satellite communication (col. 5, lines 56-64).

The limitation of **claim 13** is encompassed by the teachings of Mitchell in view of Dimitrijevic, further in view of Barbas, as discussed above relative to claim 10. In particular, Mitchell discloses the content comprises Internet web pages (col. 5, lines 43-47; Internet **210** and Web Site **205**).

The limitation of **claim 14** is encompassed by the teachings of Mitchell in view of Dimitrijevic, further in view of Barbas, as discussed above relative to claim 10. In particular, Mitchell discloses the content comprises audio data (streaming audio content; col. 8, lines 53-57).

The limitation of **claim 15** is encompassed by the teachings of Mitchell in view of Dimitrijevic, further in view of Barbas, as discussed above relative to claim 10. In particular, Mitchell discloses the content comprises video data (streaming video content; col. 8, lines 53-57.

9. **Claims 18** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell, U.S. Patent No. 6,529,706 in view of Dimitrijevic et al. (Dimitrijevic), U.S. Patent No. 5,978,363, as applied to claim 16, and further in view of Barbas et al (Barbas), U.S. Patent No. 6,256,315.

As for **claim 18**, the combination of Mitchell in view of Dimitrijevic is relied upon as discussed above relative to claim 16. But Mitchell in view of Dimitrijevic fails to disclose monitoring loading on a plurality of buffers to provide bandwidth utilization.

However, Barbas, in an analogous art, teaches plurality of buffers (Fig. 1; buffers **38** associated with queue entry **34b** and buffers **36** associated with queue entry **34a**; see col. 5, lines 6-11)) in communication with queue traversal logic (i.e., policy algorithm; see col. 5, lines 46-51, describing queue traversal logic **40**) to provide bandwidth utilization (col. 5, lines 12-51) for the benefit of temporarily storing data units with relative priorities when transmission bandwidth becomes congested (see col. 2, lines 38-46).



Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the policy algorithm of Mitchell in view of Dimitrijevic to incorporate a plurality of buffers in communication with the policy algorithm to provide bandwidth utilization, as taught by Barbas, for the benefit of temporarily storing data units with relative priorities when transmission bandwidth becomes congested in a content distribution system.

### ***Conclusion***

10. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Shelton whose telephone number is (703) 305-8714. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Brian Shelton  
Examiner  
Art Unit 2611

BS

  
VIVEK SRIVASTAVA  
PRIMARY EXAMINER